



Assembly, Installation, Operation and Maintenance Instructions

Kit, Base Rail Bracket Part # 31564

Dealer / Installer: Provide a copy of these Instructions to the end user of this product. These Instructions provide important operating and safety information for proper usage of this product. Demonstrate the proper use of the product with the end user. Have the end user demonstrate that they understand the proper use of the product.

End User: Read and follow all instructions included in this manual. Ask your Dealer / Installer for assistance if you do not understand the proper use of the product. Never remove any warning decals from the product.

APPLICATION: 2004 – 2014 FORD F150 PICK-UPS

NOTE: This bracket kit is to be used with the 31323 4 Bolt Bed Rail Kit or 30686 10 Bolt Bed Rail Kit.

COMPLETE PARTS LIST		
Item No.	Description	Quantity
1	Driver Side Front Bracket	1
2	Passenger Side Front Bracket	1
3	Driver Side Rear Bracket	1
4	Passenger Side Rear	1
5	Rear Mounting Strap	2
6	1/4" Spacer Plate	4
7	1" Spacer Tube	4
8	5/8" -11 X 3" Grade 5 Hex Head Bolt, Black	4
9	Ø5/8" ID X Ø1-3/4" Flat Washer, Black	4
10	Ø5/8" X Ø1-1/4" Flat Washer, Clear	4
11	Ø5/8" X Ø1.079" Flat Washer, Clear	4
12	Ø5/8" -11 Grade 5 Hex Nut, Clear	4
13	1/2" -13 X 4-3/4" Grade 5 Hex Head Bolt, Clear	4
14	Ø1/2" Flat Washer, Clear	4
15	1/2" -13 Nylock Nut	4
16	7/16" -14 X 2" X 1.41" U-Bolt	2
17	Ø7/16" X 7/8" Flat Washer, Clear	4
18	7/16" Lock Washer, Clear	4
19	7/16" -14 Grade 5 Hex Nut, Clear	4
20	Pull Wire	1

Tools Required
7/16" Socket & Wrench
3/4" Socket & Wrench
15/16" Socket & Wrench
Torgue Wrench
Safety Glasses

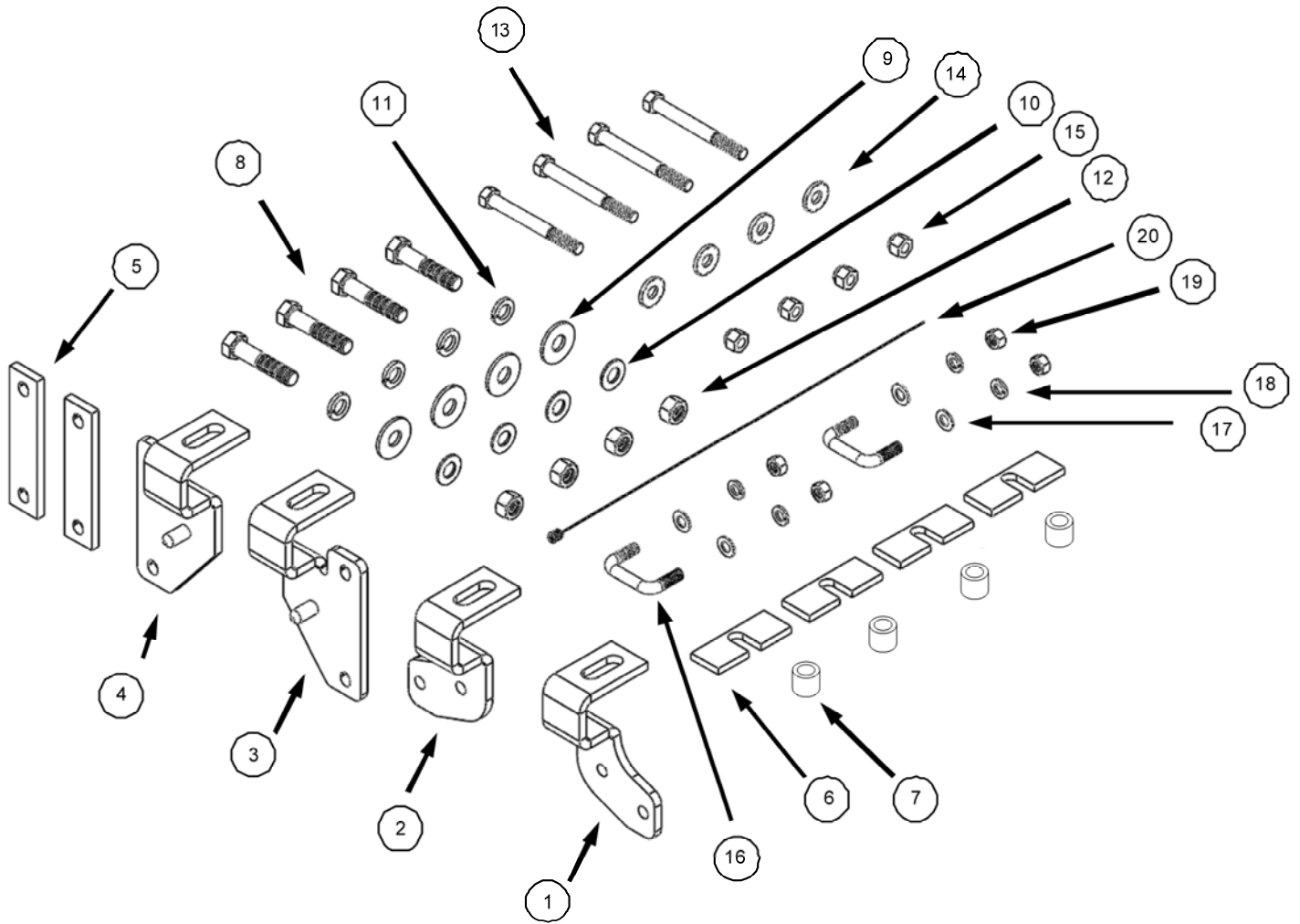
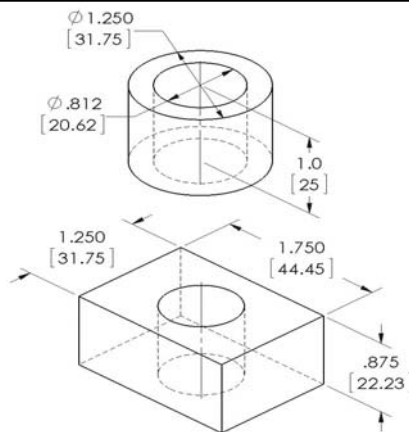
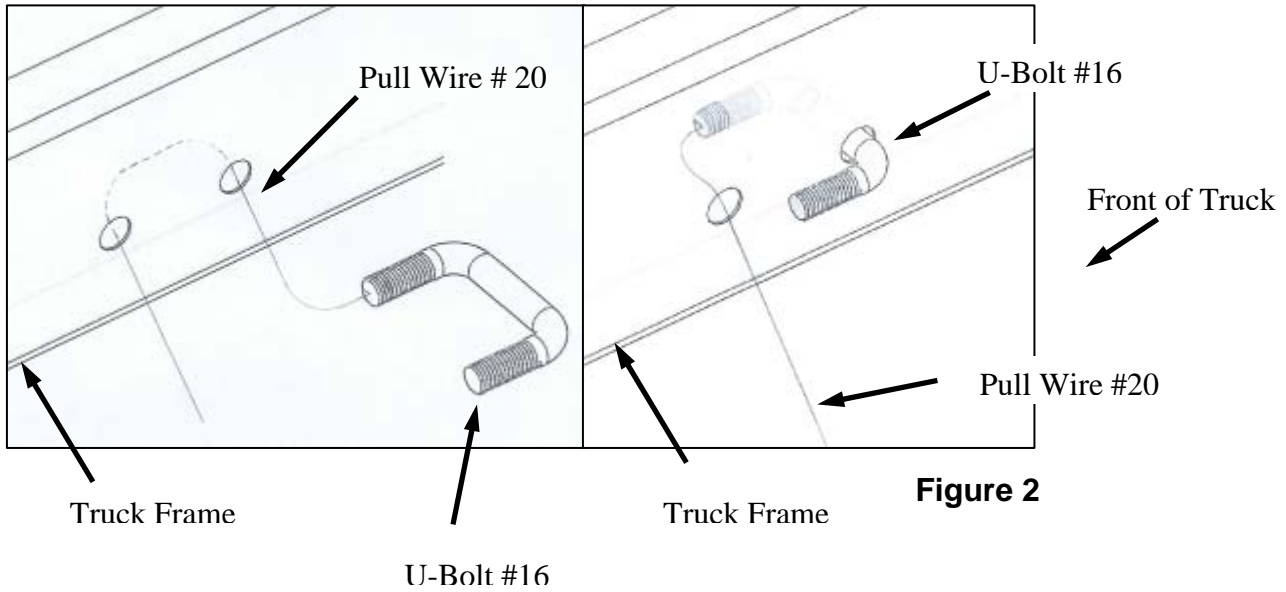


Figure 1

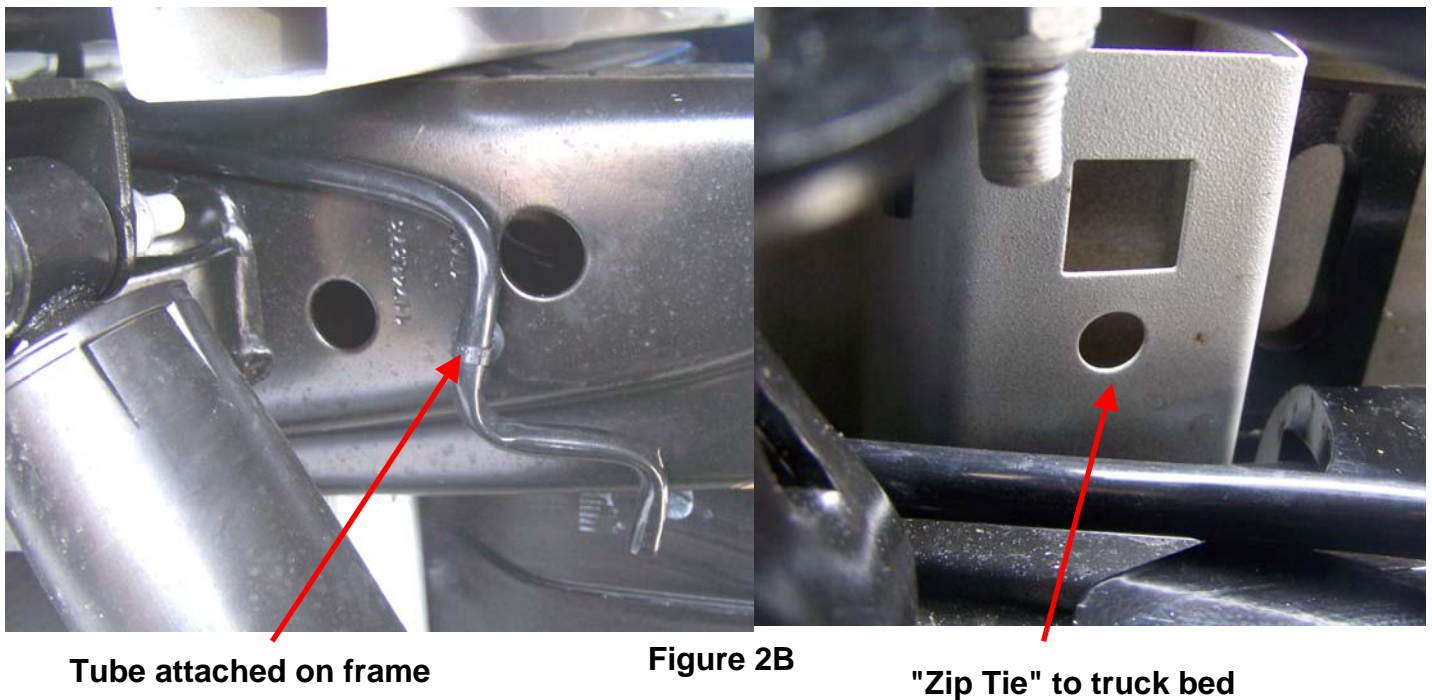
This kit may contain either one of the spacers (item 7) shown below.



1. Locate the two holes in the outer surfaces of the truck frame behind the shock mount. Place the pullwire on one leg of u-bolt #16 as shown in Figure 2 and install u-bolt into the two holes in truck frame.

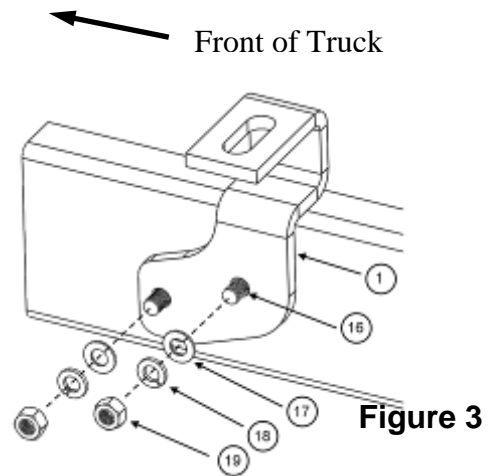


Note: 2011 Models may have a tube attached near this location on the driver's side, If so, gently pry tube and plastic attachment off of the frame and "zip tie" to the truck bed. See Figure 2B.

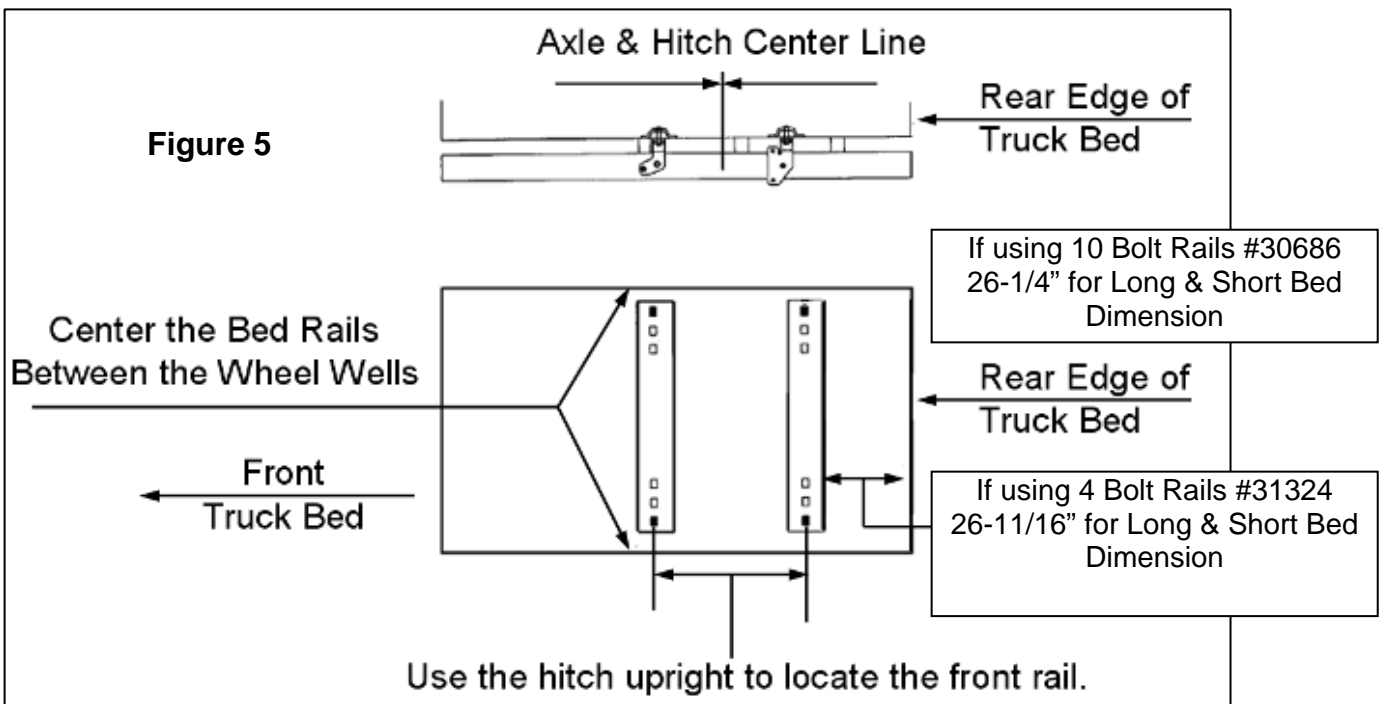
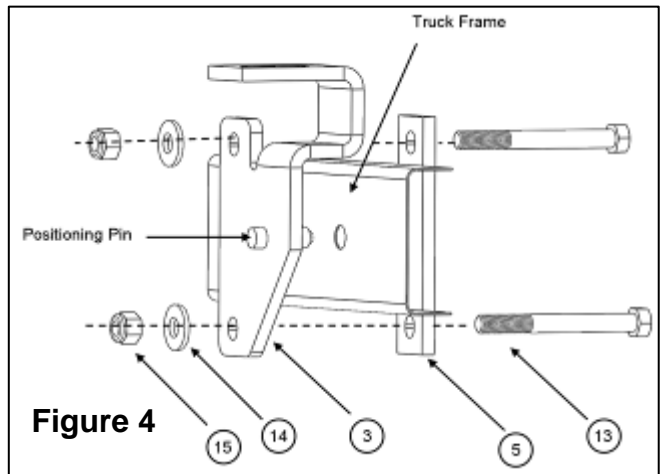


2. Position the left front bracket #1 against the truck frame so previously installed u-bolt extends out through the two holes in bracket. Bolt bracket loosely in place as shown on Figure 3. Repeat installation procedure on right side of truck using the right front bracket #2.

3. Position the left rear bracket #3 against outer surface of truck frame, just forward of the round tube cross member welded into the frame. There will be a hole near the center of the frame where the positioning pin in bracket will be inserted. Place one of the rear mount straps #5, against the inner surface of the truck frame and bolt in place with 1/2" bolts #13. These bolts will go above and below the truck frame and connect bracket #3 and strap #5 together. See Figure 3. Repeat installation procedure on right side of vehicle using the right rear bracket #4 and remaining rear mount strap #5.



4. Place the two base rails across the truck bed between the wheel wells. Position the 5th wheel uprights between wheel wells. When hitch is correctly positioned in the bed and the base rails are parallel, mark four attachment points on the truck bed using the 5/8" square holes indicated on Figure 4. Check below the bed before drilling holes to see that all wiring, brake lines, or other obstructions are moved out of the way and will not be contacted by the drill.



5. Drill a 1/4" pilot hole down through the end square hole in each base rail. Check under bed to see that holes line up with slots in top of previously installed frame brackets. Make adjustments in base rail placement as needed. Move base rail assembly away from hole locations and drill a 5/8" hole down through bed at pilot holes. Take care that drill bit does not contact the under bed frame brackets.
6. Reposition the base rails in the bed so that the square 5/8" hole in the end of each rail is lined up over the drilled holes. Place a 1" spacer tube (item #7) under the ends of each base rail, in line with the drilled holes performed in step 5. See Figure 6 below.

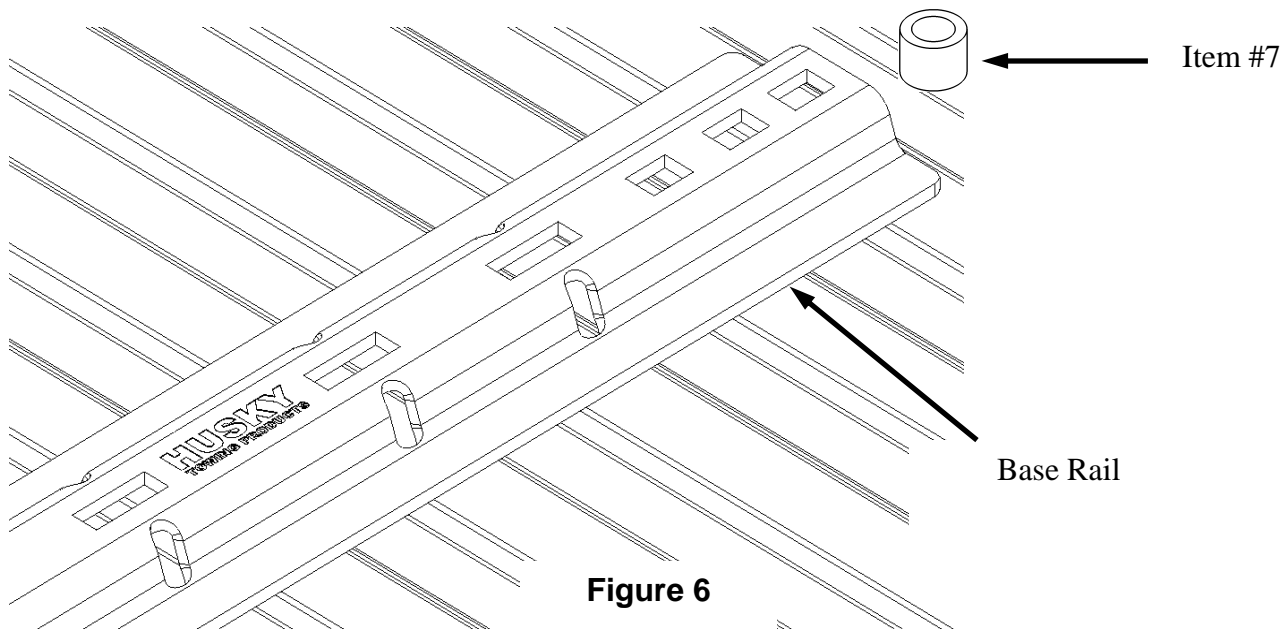


Figure 6

7. If the bed corrugation above the angle bracket is **UP**, leaving a space above the angle bracket, place a spacer plate, item #6 in the location as shown in Figure 7. If the corrugation is **DOWN**, at this location, place a spacer plate, item #6, in the bed, under the base rail as shown.

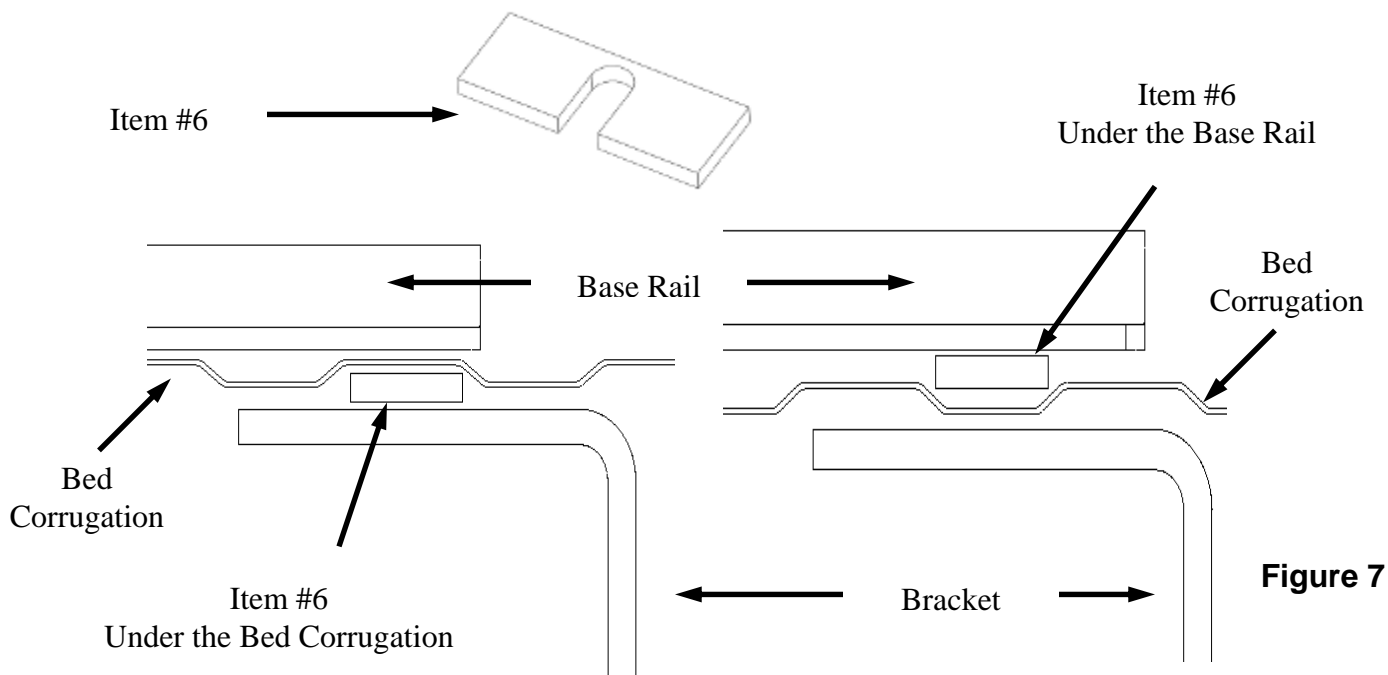


Figure 7

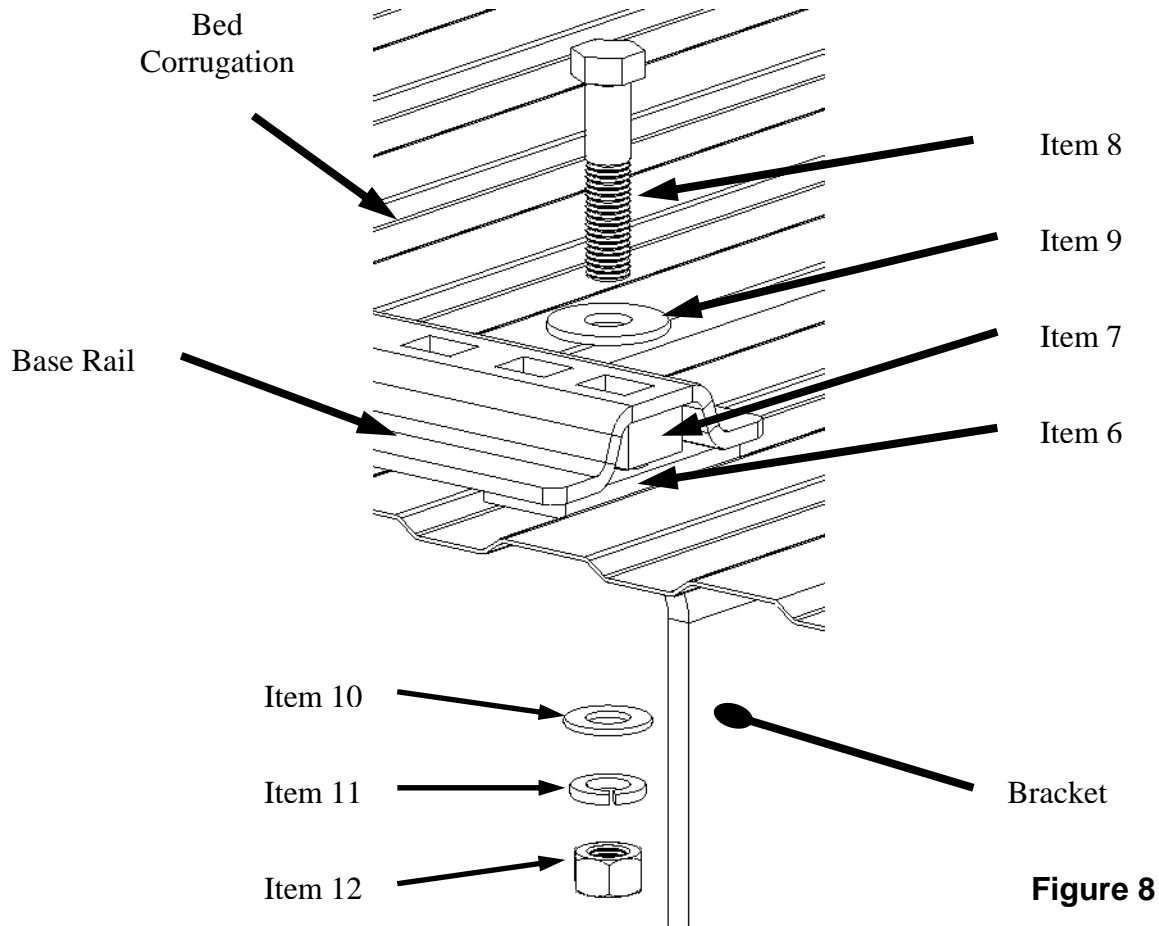


Figure 8

8. Tighten all 1/2" attachment bolts to 75 ft-lbs torque. Tighten both 7/16" U-Bolts to 35 ft-lbs torque. Failure to tighten bolts as described may result in fastener loss or failure.
9. Check each base rail hitch pin for freedom of movement before tightening the 5/8" base rail bolts. Adjust uprights, if necessary, by placing shim 31582 or 30243 between the upright and the cross member to obtain free pin movement. See Figure 9. Shims 31582 & 30243 sold separately

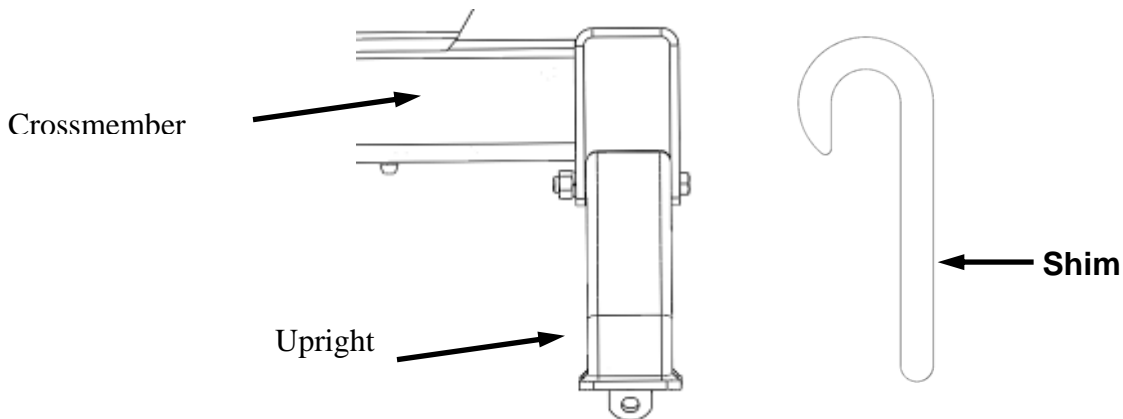


Figure 9

9. Tighten the 5/8" bolts to 150 ft – lbs torque. Failure to tighten bolts as described may result in fastener loss or failure.